

Appl. No. 09/760,379
Amdt. Dated July 14, 2004
Reply to Office Action of May 14, 2004

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A process for isolating a proteinaceous material in an aqueous sample comprising the steps:
 - (a) providing an aqueous sample comprising a proteinaceous material,
 - (b) contacting the aqueous sample with a solid phase having a surface on which is a mixture of hydrophobic groups and hydrophilic groups for binding the proteinaceous material to the solid phase, wherein the solid phase comprises magnetic solid particles having a diameter from ≥ 1 nm to ≤ 10 mm, and wherein the proteinaceous material is bound reversibly and unspecifically to said hydrophobic groups;
 - (c) removing unbound components from the solid phase,
 - (d) eluting the proteinaceous material from the solid phase, and
 - (e) removing the magnetic solid particles by magnetic separation, thereby isolating the proteinaceous material.

2-4. (Canceled).

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5. (Previously presented) The process of claim 1, wherein the particles are paramagnetic or ferromagnetic.

6. (Previously presented) The process according to claim 1, wherein the hydrophobic groups are alkyl groups or aryl groups.

7. (Previously presented) The process according to claim 6, wherein the alkyl groups are at least one of a C₈ alkyl and a C₁₈ alkyl.

8. (Previously presented) The process according to claim 1, wherein the hydrophilic groups are hydroxyl groups.

9. (Currently amended) The process according to claim 1 A process for isolating a proteinaceous material in an aqueous sample comprising the steps:

- (a) providing an aqueous sample comprising a proteinaceous material,
- (b) contacting the aqueous sample with a solid phase having a surface on which is a mixture of hydrophobic groups and hydrophilic groups for binding the proteinaceous material to the solid phase, wherein the solid phase comprises magnetic solid particles having a diameter from ≥ 1 nm to ≤ 10 mm, and wherein

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the proteinaceous material is bound reversibly and unspecifically to said hydrophobic groups;

- (c) removing unbound components from the solid phase,
- (d) eluting the proteinaceous material from the solid phase, and
- (e) removing the magnetic solid particles by magnetic separation, thereby isolating

the proteinaceous material, wherein the molar ratio of hydrophobic to hydrophilic groups is from 10:1 to 1:10.

10. (Canceled).

11. (Previously presented) The process according to claim 1, wherein the solid phase having proteinaceous material bound thereto is subjected to at least one washing steps.

12. (Canceled).

13. (Canceled).

14. (Previously presented) The process according to claim 1, wherein the isolated proteinaceous material is analyzed by mass spectrometry.

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15. (Previously presented) The process according to claim 1, wherein the magnetic separation is automated.

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